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# University teachers' conceptions of their current and ideal intermediate assessment: an A+ is good, but speaking your mind is better

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## ABSTRACT

Assessment in higher education with a transformational instead of a reproductive purpose can be a powerful way of supporting student learning. Since university teachers usually design their own assessments, it is important to investigate their conceptions of assessment. The current study focuses on teachers' conceptions of their current and ideal assessment with a focus on intermediate assessment. Thirteen teachers teaching law, psychology and criminology, reflected on their current and ideal assessment in an attempt to eliminate the influence of practical constraints on assessment practice. Results indicate that the majority of teachers have transformational conceptions of their intermediate assessment practice, and in general, their conceptions of the ideal assessment are even more transformational. This suggests that teachers' main focus for assessment is on student learning and that a lack of transformational assessments in practice may be mainly caused by external constraints.


## KEYWORDS

Conceptions of assessment; intermediate assessment; continuous assessment; university teachers; interviews

Assessment is used to measure, guide, focus and enhance student learning in higher education. Several researchers have investigated what assessments optimally support student learning. An oft-cited example is Gibbs and Simpson (2004), who proposed 10 conditions that assessment in higher education should meet to support student learning, including that the assessment tasks should encourage students to engage with learning materials and that feedback should be provided in such a time that students can still attend to it. Other researchers focus on formative, as opposed to summative, assessment as a way to support student learning.

The distinction between the summative and formative roles of assessment is critically reviewed by Bennett (2011). The author suggests a more nuanced view of the relationship between assessment purpose (assessment *of* learning and assessment *for* learning) and assessment type (summative or formative), distinguishing between primary and secondary purposes. Summative assessments primarily document what students know and can do, but secondarily can support students' learning directly or indirectly by modification of teacher instruction. Similarly, formative assessment's primary focus is to support students' learning and inform teacher instruction, but secondarily also exhibits what students know and can do. Formative assessment can be defined as follows:

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Practice in a classroom is formative to the extent that evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers, to make decisions about the next steps in instruction that are likely to be better, or better founded, than the decisions they would have taken in the absence of the evidence that was elicited. (Black and Wiliam 2009, 9)

Literature reviews (e.g. Black and Wiliam 1998; Kluger and DeNisi 1996) and meta-analyses (e.g. Kingston and Nash 2011) suggest that well-designed formative assessment can cause achievement gains, dependent on student characteristics and how formative assessment has been carried out.

Assessment can measure a variety of knowledge and skills, which are often classified by using the two dimensions of Bloom's revised Taxonomy (Krathwohl 2002). The first dimension focuses on the kind of knowledge that is assessed, and the second dimension focuses on six cognitive processes associated with the assessment. These cognitive processes can be divided into reproductive processes (remember, understand and apply) and transformational processes (analyse, evaluate and create). In general, these processes are viewed in a hierarchical way (Krathwohl 2002), and assessment using transformational processes is deemed 'better'.

In general, the content of higher education curricula is not very constrained. This allows teachers to decide which specifics they want to teach and how they want to assess their students. Subsequently, teachers' ideas about assessment play a large role in how assessment in higher education is designed. Several authors have investigated higher education teachers' ideas about assessment (Postareff et al. 2012; Reimann and Sadler 2017; Sadler and Reimann 2018; Samuelowicz and Bain 2002; Watkins, Dahlin, and Ekholm 2005). Three of these studies constructed categorisation schemes to classify these assessment ideas.

First, Samuelowicz and Bain (2002) conducted interviews with 20 Australian academics. Interview questions focused on specific exam questions brought in by the interviewees, as well as on assessment in general. The interviews resulted in six assessment belief dimensions. These dimensions focused on (1) the nature and structure of knowledge, (2) the degree of integration of knowledge, (3) the degree of transformation of knowledge, (4) the differences between good and poor answers, (5) the role of assessment in teaching and learning and (6) the use of feedback gained from assessment. On each dimension, a belief could range from knowledge reproduction to knowledge construction or transformation. Subsequently, these belief dimensions were used to categorise assessment practice orientations. Examples of these orientations are 'reproducing bits of knowledge', where teachers' beliefs all were focused on reproduction, and 'transforming conceptions of the discipline/world', where all beliefs focused on knowledge construction or transformation. Teachers' orientations to assessment were found to be highly correlated with their orientation towards teaching and learning.

Second, Watkins, Dahlin, and Ekholm (2005) interviewed 26 university teachers from Hong Kong and 20 from Sweden, to investigate teachers' conceptions of the backwash effect (the way in which you assess influences the way students learn) and how teaching and assessment relate to each other. They constructed eight categories, which could then be grouped in three groups. The first three categories focused on the content that students learned, the second group consisted of three categories that focused on learning processes but still placed importance on basic knowledge, and the final two conceptions could be put in a group where basic knowledge played no role, but deeper learning strategies did. These groups partly overlap with dimension five of Samuelowicz and Bain (2002), focusing on the role of assessment in teaching and learning.

Third, Postareff et al. (2012) interviewed 28 Finnish university teachers. Interview questions focused on what teachers think is important in assessment, the purpose of assessment and how teachers assessed student learning. Interview results were categorised into five groups representing assessment purposes. These purposes were (1) measure repetition and memorisation of facts, (2) measure how well students cover the contents of the study module, (3) measure application of knowledge, (4) measure deep understanding and students' own thinking and (5) measure the process and development of students' own thinking. The first three purposes indicate reproductive conceptions and the last two transformational conceptions. The majority of teachers displayed

reproductive assessment conceptions. Furthermore, teachers' assessment conceptions and assessment practices were consistently aligned, indicating that students often have to complete traditional assessments, focused on reproducing knowledge.

Myers and Myers (2015) found that teachers' assessment practices were constrained by their workload, evidenced by the fact that teachers who taught more classes often used less learner centred assessments. Additionally, Goos, Gannaway, and Hughes (2011) found that teachers' challenges when using assessment focused on conditions like workload and bureaucracy as well. When assessment practices are constrained by outside factors, teachers are not given the opportunity to translate their assessment conceptions into practice.

## The current study

The aim of this study is to increase insights in higher education teachers' conceptions of assessment. Whereas previous studies focused on teachers' assessment conceptions in general, our study specifically focuses on the conceptions of intermediate assessment.

Intermediate assessment, also known as continuous or frequent assessment, focuses on the assessments that take place during the course period, as opposed to end-of-term assessments. Gibbs and Simpson (2004) mention that frequent assessments with formative feedback were 'central to student learning' (8). Intermediate assessments can have various types, and because of their placement during the course period they often address different goals than end-of-term assessments do. An end-of-term assessment, for example, may address whether students show sufficient knowledge of the course material, but an intermediate assessment can focus more on the development of this knowledge by, for example, eliciting study time and providing feedback at a moment that students can still use this feedback in their learning (2 of the 10 conditions by Gibbs and Simpson 2004). Because of this difference in assessment goals, it stands to reason that teachers' assessment conceptions may differ as well. As with other forms of assessment, teachers' ideas of their current practice might be different from their ideal, as external constraints might inhibit teachers to put their ideas into practice. Therefore, we ask teachers to reflect on their practice as well as their ideals. The following research question guided our research:

What differences in conceptions of intermediate assessment do university teachers display when discussing their current and ideal intermediate assessment?

## Method

### Recruitment

The university's digital study guide was used to gain an overview of the first-year law, criminology or psychology courses that used intermediate assessment. A total of 17 courses qualified, and course coordinators of these courses were invited for an interview by email. This email provided a short overview of the interview topic, and the themes that would be discussed. If a teacher had not responded after two weeks, a reminder email was sent.

### Participants

All 17 invited course coordinators were involved in teaching the courses. Three course coordinators declined participation and two did not respond to the invitation. Of the participating teachers, five taught psychology courses (teachers 2, 3, 9, 10 and 12), four taught criminology courses (teachers 1, 4, 6 and 7), one taught a law course (teacher 11) and two taught a course that was part of both the law and criminology curriculum (teachers 5a and 8). Teacher 5a asked to be interviewed with a co-worker because he had only recently taken over the coordinating duties. Ultimately, 13 teachers (7 female) were interviewed during 12 interviews.

With regard to the teaching experience of the participants, eight teachers were involved in teaching or coordinating the courses under investigation since the curriculum of the programmes was revised in the 2013–2014 academic year and two were first-time teachers of this current course. The remaining three teachers had taught the course under investigation once or twice before. Most teachers expressed experience with teaching courses beyond the course under investigation, or with teaching the course before the curricular revision.

## Interviews

All semi-structured interviews were conducted by the first author during December 2016 and January 2017. All interviews followed the same topic list. The first questions were about teachers' current intermediate assessment practice, and their goals and experiences. Subsequently, teachers reported what their ideal intermediate assessment would be, focusing on a 'perfect world' without practical constraints. Finally, the interviewer presented a hand-out with a short overview of intermediate assessment in the literature (preliminary results from a literature review by Day et al. 2017b). Using the information on this hand-out, teachers further reflected on their ideas for ideal assessment.

Teachers were interviewed in their office, all interviews took between 30 and 60 minutes. One teacher was abroad as a visiting scholar, and was interviewed using Skype™. All interviews were audiotaped and annotated, and the interview transcripts were presented to teachers for a member check. Nine teachers greenlighted the transcript, and two wanted to have further insight into how their quotes were going to be used in the final article, but had no objection to their portrayal. Two teachers were no longer working at our university during the member check period.

## Analysis

### Coding scheme

Previous research investigating assessment conceptions using bottom-up coding techniques has found very comparable categories of conceptions of general assessment (Postareff et al. 2012; Samuelowicz and Bain 2002; Watkins, Dahlin, and Ekholm 2005). To align our investigation of intermediate assessment conceptions with the existing literature, our coding scheme consisted of the five assessment conceptions devised by Postareff et al. (2012) and two of the assessment belief dimensions from Samuelowicz and Bain (2002), specifically dimensions five (regarding the role of assessment) and six (regarding the use of feedback).

Two codes were used to distinguish between conceptions of the current and ideal intermediate assessment. An additional code was added to indicate when teachers expressed negative ideas about some conceptions, for example, to say that intermediate assessment should not just be exam training (negative about the purpose of assessment R1; reproduction of knowledge). A full overview of the codes used can be found in Table 1.

### Analysis procedure

The interview transcripts were analysed by the first author. All transcripts were read, and information pertaining to the current assessment or the ideal assessment was highlighted in two different colours. Subsequently, the transcript files were uploaded into ATLAS.ti 7 for analysis. Units of analysis were decided by speech turns, where an uninterrupted speech turn by a teacher was taken as a singular unit.

The analysis procedure was conducted in several iterations. In the first iteration, the relevant interview sections were coded as either *current assessment* or *ideal assessment*. Sections of the text that were not dealing with either two assessments were not included in the final analysis. The second iteration consisted of applying Postareff et al.'s (2012) five conceptions for the purpose of assessment to the statements relating to either assessment. Multiple conceptions could apply to a single speech turn. In the third iteration of analysis, the two assessment belief dimensions of Samuelowicz and Bain (2002) were used to classify the statements.

**Table 1.** Overview of the codes used in the analysis of the interviews.

	Purpose of assessment is to measure (Postareff et al. 2012, 87)	Role of assessment in teaching and learning (Samuelowicz and Bain 2002, 182–183)	Use of feedback gained from assessment (Samuelowicz and Bain 2002, 182–183)	Other codes
Reproduction	R1. Repetition and memorisation of facts	R1. Academic believes students have to be forced to study and assessment is believed to be the best tool to achieve this	R1. Academic believes that feedback from student performance should be used to alter his/her teaching	Current intermediate assessment
	R2. How well students cover the contents of the study module	R2. Academic believes that assessment forces students to study, and that marks give them an indication of the progress made and rewards their efforts	R2. Academic believes that feedback from student performance should be used to change the academic's or students' actions	Ideal intermediate assessment
	R3. Application of knowledge		R3. Academic believes that feedback from student performance should be used to monitor students' learning and help them improve	Negative modifier
Transformation	T4. Deep understanding and students' own thinking	T3. Academic believes assessment to be an integral part of teaching and learning, a means of helping students learn.	T4. Academic believes that feedback from student performance should be used to challenge students' existing ideas and understandings.	
	T5. The process and development of students' own thinking			

In all interviews, there were sections, for example, descriptions of the design of the assessment, that did pertain to the current or ideal assessment, but could not be classified under the assessment conceptions and beliefs (Postareff et al. 2012; Samuelowicz and Bain 2002, respectively). These sections are used as context in the case descriptions.

After analysis, frequencies of different codes were tallied per assessment mode. Since, to our knowledge, our study is the first focusing specifically on intermediate assessment, we decided to portray the whole variety of teachers' conceptions and beliefs instead of classifying them into one group according to their highest order or most uttered conception or belief.

### *Reliability of the analysis*

To ensure the reliability of the coding, the second author conducted an audit of the coded transcripts. During this audit he critically assessed each transcript with the coding scheme. Afterwards, the first and second authors discussed the outcomes and adapted the codes where necessary. Across all 12 interviews the second authors' comments led to 13 added and 8 deleted codes. Furthermore, in 16 cases the authors agreed that the original coding was sufficient. Ultimately, across 12 interviews, there were 653 codes, with 208 relating to teachers' conceptions and beliefs for the ideal and current assessment.

## **Results**

The current assessments utilised by teachers can roughly be classified into six groups. Teachers used presentations (10), preparatory workgroup assignments (5ab, 6), short written assignments (3, 8, 9),

research reports (1, 7, 12), partial exams (4, 11) or multiple choice questions (2). When proposing ideal assessments, teachers often borrowed ideas from their own experiences as a student, or from courses they teach in different undergraduate or graduate courses. These ideal assessments could also be clustered in six groups. Four teachers wanted to use one or more essays, two wanted to use preparatory workgroup assignments, two teachers wanted to integrate assessment into teaching by continuously assessing, one wanted to use audience response systems to assess student learning during lectures, one wanted students to be involved in the research process. Three teachers wanted to use what could be referred to as classroom assessment, inspired by imagery of Ivy League universities:

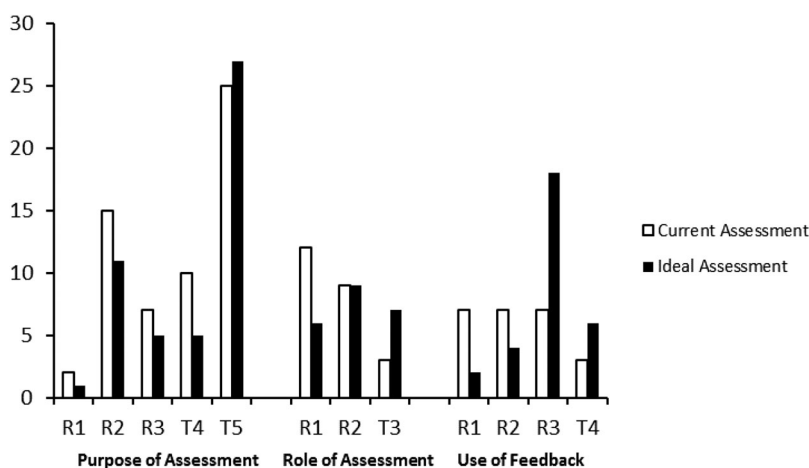
But compare it to Harvard. Look at how they do it, like you see in the movies. Students know, you bring your books and the class is not that big, not small but not that big. You bring your books and the teacher asks [a question]. When you're lost for words, you are [ridiculed], so no one says 'Um...'. (Teacher 9)<sup>1</sup>

In general, teachers have strong transformational conceptions for the current and ideal assessment, as can be seen in Figure 1. However, there are large individual differences between teachers. Figures portraying the individual conceptions of each teacher can be found in the online supplemental material. Based on their conceptions about the purpose of their current and ideal assessments (Postareff et al. 2012) the teachers were divided into two main groups. The first group was teachers that displayed no difference in conceptions between their current and ideal assessment. The second group was that of teachers who do portray different conceptions between the current and ideal assessment. Within these two main groups, five subgroups can be discerned. These subgroups, with a short summary of conceptions are presented in Table 2 and further discussed in the following sections. To reiterate, reproductive conceptions focus on memorisation, covering content and application of knowledge, whereas transformational conceptions focus on deep understanding and the development of understanding, consult Table 1 for a full list of codes related to reproductive and transformational conceptions.

### *Teachers who display no difference between the current and ideal assessment*

#### *No transformational conceptions*

One teacher (teacher 5a) mentioned no transformational conceptions for the current or the ideal assessment. He did touch on several reproductive conceptions for his ideal assessment, which were workgroup assignments. His beliefs about the role of an assessment focused on the fact that



**Figure 1.** Overview of the total number of quotes discussing assessment conceptions and beliefs of teachers. See Table 1 for an extensive description of each code.



**Table 2.** Overview different subgroups of teachers and a summary of conceptions and beliefs within each subgroup.

No difference in conception			Difference in conception	
No transformational conceptions (N = 1)	A mix of conceptions (N = 3)	Only transformational conceptions (N = 1)	Ideal is more transformational (N = 7)	Current is more transformational (N = 1)
Class participation is better when students know the material. Can students apply material that they can reproduce?	Assessment should help students practice their skills. Give feedback by discussing written work in detail. Students should know all the material	Student knowledge should be developed in small scale classes with enough supervision	Students should learn through direct feedback. Actively working with the material presents the students with a chance for knowledge development. Learning curves are important	Application of knowledge is important. Give feedback by discussing written work in detail

assessment forces students to study and that students could be rewarded by extra exam questions for example. However, simultaneously he underscored the fact that ‘[...] it should come from students themselves. It frustrates me that it is needed to do it this way, and that it only happens when we do’ (Teacher 5a). This indicates that he would prefer that intermediate assessment was not needed, but he conceded that it may be necessary to have students prepare for class. Regarding the use of feedback he briefly touched upon the fact that feedback should mainly be used to monitor learning and adjust the learning process where necessary.

### *A mix of reproductive and transformational conceptions*

Three teachers (4, 6, 9) displayed a mix of reproductive and transformational conceptions for both current and ideal assessment. Two of these teachers (4 and 9) mentioned the ‘Harvard’ type of classroom assessment as one of their ideal assessments, in addition to essays (both) and using different methods of assessment to conclude a portion of the subject matter every week (teacher 4). Both teachers expressed a range of conceptions for the ideal assessment. When investigating their beliefs, teacher 4 did not discuss the role of assessment, but he believed feedback for ideal assessments should be used to monitor learning and challenge misconceptions. ‘I try to work with assessment forms that have a reasonable amount of detail, but it is good to provide opportunities to ask questions outside of that [...] sometimes written feedback raises new questions’ (teacher 4). Conversely, the role of feedback did not come up in conversation with teacher 9, but his belief about the role of his ideal assessment is that it is an integral part of education in addition to a potent measure to get students to study. This is also apparent in his quote on page 10, where he stresses the importance of preparing for class.

The ideal assessment of teacher 6 is continuous assessment through practice material, since her course (a methodology and statistics course) lends itself very well for this. ‘And in terms of a skill development track, what they learned with me they can practice before they start [the second year methodology course], to refresh their knowledge’ (Teacher 6). Additionally, she would like to make more use of digital tools to facilitate this practice material. This continuous assessment goal is also reflected in her assessment beliefs, where assessment is an integral part of education and learning and feedback should be used to improve student learning.

### *Only transformational conceptions*

One teacher (teacher 7) displayed only transformational conceptions for both assessment types. The main focus of both assessments is different though. For the current assessment, this teacher is focused on students’ deep learning and understanding, by having them complete an interview assignment and writing a paper about this. For her ideal assessment, she would focus more on the development of students’ understanding by ‘small scale education where they go through the full [research] cycle [...] that’s something I would enjoy doing and [something] I think they would really benefit from’ (Teacher 7).



When investigating her assessment beliefs, she displays more transformational beliefs for the ideal assessment. Whereas the current assessment was shaped to force students to start working before the final exam, she felt the ideal assessment should be integrated into a research skill development track across courses. This teacher only expressed feedback beliefs for the ideal assessment, again indicating that her focus is more transformational for this assessment than for the current.

### ***Teachers who show differences between current and ideal assessment***

#### ***Ideal assessment is more transformational***

Seven teachers (2, 3, 5b, 8, 10, 11, 12) portrayed more transformational conceptions for their ideal assessment. They would focus on developing student understanding, by administering essays (3, 5b, 8, 10), workgroup assignments (11), continuously testing (2) or testing during lectures (12).

All four teachers that would prefer essays as their assessment, also portrayed beliefs that feedback should be used to monitor and improve student learning. About students going through a learning curve by using multiple essays, teacher 10 said 'In the beginning [students] relatively have a lot of trouble with it, and in the end they really realise how they should do it, it is very rewarding for the student and the teacher.' Teacher 8 emphasised the importance of monitoring learning in the following way 'A drawback of just doing an exam is that all subsets of the material have the same weight. That way, you can fundamentally misunderstand one facet, but compensate that with knowledge of the other material.' He felt that by assessing students weekly, teachers could gain more insight into the specific knowledge gaps of students.

The teachers have differing beliefs about the role of assessment in education. Like her colleague teacher 5a, teacher 5b laments the fact that students often need to be forced to study, because she would prefer students to be more independent and in charge of their learning. 'I believe intrinsic motivation is so important. You can devise so many intermediate assessments and everything, but a large part is dependent on [intrinsic motivation].' Teacher 3 also touched on intrinsic motivation, wanting to spark enthusiasm by giving students free reign in choosing an essay topic 'Getting an A+ is nice, but I believe speaking your mind is much nicer.'

The three teachers with other ideal assessments than essays did not discuss transformative feedback beliefs for the ideal assessment. However, teacher 2 wondered 'whether [something] is an intermediate assessment if there is no feedback' when discussing the current assessment. Furthermore, teacher 2 believes assessment is an integral part of education in concordance with his ideal assessment. 'I would test them continuously and I would advise them to continuously test themselves.' Teacher 11 is more focused on inciting students to work on learning, citing the advantage of intermediate assessment is that students 'may learn to organise their study behaviour' and get an indication whether they understand the material. For her ideal assessment, teacher 12's goals were two-fold. She wanted to use testing during lectures to gauge the quality of her lectures and her teaching on the one hand, and to improve learning on the other hand, since 'the effect of lectures is dependent on how actively you are processing the material. So how much of it is memory retrieval, independent thinking etcetera'. Making the assessment again an integral part of the course.

#### ***Current assessment is more transformational***

One teacher (1) expressed more transformational conceptions for the current assessment, a research report, then for her ideal assessment. However, when discussing her ideal assessment, she brainstormed about several assessment types, some with more reproductive conceptions, like multiple choice or open-ended exams. Ultimately, this teacher focused on an ideal assessment of discussing written work and the 'Harvard' classroom assessment, where she displayed several transformational conceptions as well.

When addressing her assessment beliefs, no discussion of the role of the ideal assessment in teaching and learning came up, but regarding her feedback beliefs this teacher focused on using feedback to monitor learning, possibly even across courses.

Do you give the feedback [in a half semester course] for them to use in that course and write a paper, or do you try to teach first-year students how to write a paper and give them extensive feedback that they can use for the rest of their education?

### *Reasons for discrepancy between current and ideal assessment*

Several teachers gave rationalisations for the fact that their ideal assessment is not their current assessment. A main explanation that came up was that the ideal assessment usually added workload: 'But that would take an hour per essay, it would take 600 hours and I only work here 25 hours per week' (Teacher 3). Further explanations were 'I am not sure whether that's really suited for first-year students' (Teacher 4), or 'The study culture over there is different' (Teacher 9), coincidentally both referring to 'Harvard' style classroom assessment.

### **Discussion**

In the current study, we tried to discover teachers' conceptions of intermediate assessment by asking them to reflect on their current assessment practice as well as their ideal assessment. Results indicate that the majority of teachers have transformational assessment conceptions, and that, overall, the conceptions for the ideal assessment are more transformational than those for the current assessment. Teachers posed that development of understanding and support of learning should be the main focus of intermediate assessment. They would like to employ assessments like essays or continuous testing to achieve this goal.

It is encouraging to see that teachers strongly focused on the student learning aspect of assessment. When Watkins, Dahlin, and Ekholm (2005) interviewed teachers about how assessment influences student learning (the backwash effect), not all teachers referred to content and deep learning, aspects that did come up often during our interviews. Interestingly, the amount of utterances focusing on deep learning and students' own thinking went down from the current to the ideal assessment, as shown in the purpose of assessment T4 column in Figure 1. A possible explanation for this is that for the ideal assessment teachers wanted to focus more on the development of students' own thinking, which would make their utterances fall under the purpose of assessment T5. This may be a downside of our decision to show all conceptions portrayed by teachers instead of just the highest level they portrayed.

Black and Wiliam (2004) pose that formative assessment is the optimal assessment for student learning. Even though strict discussion of formative assessment did not occur in our study, teachers explicitly focused on learning effects of the assessment, as well as on summative functions of their assessment. In this light, it is interesting that Segers and Tillema (2011) found that secondary school teachers did not differentiate between the summative and formative functions of assessment. Their results show teachers' conception that assessment should inform students and teachers about students' performance, whether that be through summative or formative assessments. This conception overlaps with Postareff et al.'s (2012) conception five, and Samuelowicz and Bain's (2002) use of feedback dimension, which were often occurring codes in our interviews.

According to Gibbs and Simpson (2004) assessment supports learning when students receive timely feedback that they attend to. This is endorsed by teachers in our study, who stress the importance of feedback in monitoring student learning and helping them improve. Beaumont, O'Doherty, and Shannon (2011) found that even though university tutors reported that they provide extensive written feedback, students often do not perceive this as useful. There may be a disconnect between 'after the fact' feedback, and feedback as a more dialogical process during which students are guided through the assessment. In the current study, teachers also discussed feedback after the fact, but because of the nature of intermediate assessment, this may have a more dialogical effect than after the fact feedback for end-of-term assessment.

Our results contrast with those of Postareff et al. (2012), who found that a majority of teachers has reproductive conceptions. A possible explanation for this discrepancy is that the current study specifically focused on intermediate assessment. When contrasting intermediate and end-of-term assessment it becomes clear that, by design, intermediate assessment is more suitable to support student learning throughout the term, whereas end-of-term assessment should measure students' achievement against a set of criteria.

This study also found a discrepancy between teachers' conceptions and their practices even though previous research has found these two to be highly aligned (Postareff et al. 2012). Reimann and Sadler (2017) argue that teachers' understandings of assessment cannot be fully discovered without looking at how they enact these understandings, indicating that teachers in the current study may not have full understanding of their ideal assessment. However, for their ideal assessment, several teachers drew inspiration from courses they taught in higher years, indicating that these are assessment practices, just not for first-year courses. Possibly, the conceptions of teachers who only have experience teaching first-year courses could be much different. Furthermore, conceptions and practice may not always align. Sin, Tavares, and Amaral (2017), for example, found that teachers incorporated measures to further employability into their curriculum, even when they did not feel that ensuring employability is an important goal of higher education.

Teachers often mentioned the workload as a constraint for using the transformational assessments that were their ideal. Myers and Myers (2015) have also identified that workload is often a factor for teachers when deciding on assessments. This is also in concordance with results from a previous study by the current authors (Day et al. 2017a), where teachers mentioned they took workload into account when designing their intermediate assessments. Four teachers participated in both the previous and the current study, indicating that workload is still an important factor for them, over two years later.

In general, transformational assessment is regarded as appealing to higher order cognitive processes (Krathwohl 2002), whereas reproductive assessment appeals to lower order processes. Therefore, transformational assessments are often seen as more ideal in supporting student learning. However, transformational assessments often also pose a higher workload for teachers. Samuelowicz and Bain (2002) suggest that some teachers may reject more transformational assessments not just because of workload, but because their beliefs about assessment do not correspond with transformational assessment. However, our current study indicates that teachers see the benefit of transformational assessments, but they often do not put this into practice because of practical constraints. Postareff et al. (2012) suggest that teachers should be made aware of the influence of assessment on student learning, but our results indicate that teachers are aware of these positive effects, but are unable to translate them into practice.

### ***Directions for future research***

Since our study was a preliminary exploration of university teachers' conceptions of intermediate assessment, additional research should be conducted to further investigate and corroborate these conceptions. Further research could focus on the differences in conception for intermediate and end-of-term assessment, instead of only one of the two.

With regard to the discrepancy between teachers' conceptions and their practice, future studies could focus on investigating the specific needs of teachers to bring their ideas into practice.

Furthermore, our study only focused on teachers in first-year psychology, criminology or law courses, and future studies can expand on the domain, as well as the educational year of the courses.

### ***Concluding remarks***

If teachers in higher education do have transformational assessment conceptions, but feel constrained by outside factors, extensive thought should be put into how we can support teachers in their assessment practice and encourage them to use more transformational assessments.

## Note

1. All quotations have been translated from Dutch and edited for legibility where necessary.

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No potential conflict of interest was reported by the authors.

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## References

- Beaumont, C., M. O'Doherty, and L. Shannon. 2011. "Reconceptualising Assessment Feedback: A Key to Improving Student Learning?" *Studies in Higher Education* 36 (6): 671–87. doi:10.1080/03075071003731135.
- Bennett, R. E. 2011. "Formative Assessment: A Critical Review." *Assessment in Education: Principles, Policy & Practice* 18 (1): 5–25. doi:10.1080/0969594X.2010.513678.
- Black, P., and D. Wiliam. 1998. "Assessment and Classroom Learning." *Assessment in Education: Principles, Policy & Practice* 5 (1): 7–74. doi:10.1080/0969595980050102.
- Black, P., and D. Wiliam. 2004. "The Formative Purpose: Assessment Must First Promote Learning." In *Yearbook of the National Society for the Study of Education*, Vol. 103 (2), 20–50. doi:10.1111/j.1744-7984.2004.tb00047.x.
- Black, P., and D. Wiliam. 2009. "Developing the Theory of Formative Assessment." *Educational Assessment, Evaluation and Accountability (Formerly: Journal of Personnel Evaluation in Education)* 21 (1): 5–31. doi:10.1007/s11092-008-9068-5
- Day, I. N. Z., F. M. van Blankenstein, P. M. Westenberg, and W. F. Admiraal. 2017a. "Teacher and Student Perceptions of Intermediate Assessment in Higher Education." *Educational Studies* 1: 1–19. Advance online publication. doi:10.1080/03055698.2017.1382324.
- Day, I. N. Z., F. M. van Blankenstein, P. M. Westenberg, and W. F. Admiraal. 2017b. "A Review of the Characteristics of Intermediate Assessment and Their Relationship with Student Grades." *Assessment & Evaluation in Higher Education* 14: 1–21. Advance online publication. doi:10.1080/02602938.2017.1417974.
- Gibbs, G., and C. Simpson. 2004. "Conditions under Which Assessment Supports Students' Learning." *Learning and Teaching in Higher Education* 1 (1): 3–31.
- Goos, M., D. Gannaway, and C. Hughes. 2011. "Assessment as an Equity Issue in Higher Education: Comparing the Perceptions of First Year Students, Course Coordinators, and Academic Leaders." *The Australian Educational Researcher* 38 (1): 95–107. doi:10.1007/s13384-010-0008-2.
- Kingston, N., and B. Nash. 2011. "Formative Assessment: A Meta-analysis and a Call for Research." *Educational Measurement: Issues and Practice* 30 (4): 28–37. doi:10.1111/j.1745-3992.2011.00220.x.
- Kluger, A. N., and A. DeNisi. 1996. "The Effects of Feedback Interventions on Performance: A Historical Review, a Meta-analysis, and a Preliminary Feedback Intervention Theory." *Psychological Bulletin* 119 (2): 254–84. doi:10.1037/0033-2909.119.2.254.
- Krathwohl, D. R. 2002. "A Revision of Bloom's Taxonomy: An Overview." *Theory Into Practice* 41 (4): 212–18. doi:10.1207/s15430421tip4104\_2.
- Myers, C. B., and S. M. Myers. 2015. "The use of Learner-Centered Assessment Practices in the United States: The Influence of Individual and Institutional Contexts." *Studies in Higher Education* 40 (10): 1904–18. doi:10.1080/03075079.2014.914164.
- Postareff, L., V. Virtanen, N. Katajavuori, and S. Lindblom-Ylänne. 2012. "Academics' Conceptions of Assessment and Their Assessment Practices." *Studies in Educational Evaluation* 38 (3): 84–92. doi:10.1016/j.stueduc.2012.06.003.
- Reimann, N., and I. Sadler. 2017. "Personal Understanding of Assessment and the Link to Assessment Practice: The Perspectives of Higher Education Staff." *Assessment & Evaluation in Higher Education* 42 (5): 724–36. doi:10.1080/02602938.2016.1184225.

- Sadler, I., and N. Reimann. 2018. "Variation in the Development of Teachers' Understandings of Assessment and Their Assessment Practices in Higher Education." *Higher Education Research & Development* 37 (1): 131–44. doi:10.1080/07294360.2017.1344199.
- Samuelowicz, K., and J. D. Bain. 2002. "Identifying Academics' Orientations to Assessment Practice." *Higher Education* 43 (2): 173–201. doi:10.1023/a:1013796916022.
- Segers, M., and H. Tillema. 2011. "How do Dutch Secondary Teachers and Students Conceive the Purpose of Assessment?" *Studies in Educational Evaluation* 37 (1): 49–54. doi:10.1016/j.stueduc.2011.03.008.
- Sin, C., O. Tavares, and A. Amaral. 2017. "Accepting Employability as a Purpose of Higher Education? Academics' Perceptions and Practices." *Studies in Higher Education* 1–12. Advance online publication. doi:10.1080/03075079.2017.1402174.
- Watkins, D., B. Dahlin, and M. Ekholm. 2005. "Awareness of the Backwash Effect of Assessment: A Phenomenographic Study of the Views of Hong Kong and Swedish Lecturers." *Instructional Science* 33 (4): 283–309. doi:10.1007/s11251-005-3002-8.